AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings are formal drawings of Figures 1-8. No new matter has been added.

REMARKS

This Amendment is in response to the Office Action dated November 16, 2005. Claims 1-49 were pending in this application at the time the present Office Action was mailed. By this amendment the abstract has been amended, formal drawings for Figures 1-8 are submitted, and claims 1, 5, 8-10, 12, 15, 17-19, 21, 22, 26, 29, 33, 36, 41, 46, and 47 have been amended. New claims 50-52 have been added. Claims 1-52 are pending. Re-examination and reconsideration are respectfully requested.

A. Objection to Drawings

The Examiner objected to the drawings and required corrected drawing sheets. Corrected drawings sheets are filed herewith. Applicants respectfully submit that the objection has been obviated.

B. Objection to Abstract

The Examiner objected to the Abstract and required deletion of the following text: "It is emphasized that this abstract is provided to comply with the rules requiring an abstract. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims (37 C.F.R. § 1.172(b))." Applicants have deleted the text as requested, but emphasizes that they are not withdrawing the intent of the deleted text.

C. Objection to Mis-Numbered Claim

In the Office Action, the Examiner noted that claim 22 was improperly numbered as claim "25". Applicants have amended the typographical error at the first occurrence of claim number "25" to be claim 22. Claim 22 has also been amended to correct its dependency to depend from claim 15.

D. Rejection Under 35 USC §112, Second Paragraph

The Examiner rejected claims 1-49 under 35 USC §112, second paragraph because of the phrase "the other one" in independent claims 1,15, 26, 33, 41, and 46. These independent claims have been amended to replace the first occurrence of the phrase with "another one". Applicants respectfully submit that the rejection has been overcome and that the claims are in condition for allowance.

E. Rejection Under 35 USC §103(a) Over Doller

The Examiner rejected claims 1-11, 13-20, 22-30, and 32-49 under 35 USC §103(a) as being obvious and unpatentable over US Patent No. 4,727,352 (Doller). Claims for an invention are not *prima facia* obvious if the primary references do not suggest all elements of the claimed invention and the prior art does not suggest the modifications that would bring the primary references into conformity with the application's claims. *In re Fritch,* 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992); *In re Laskowski,* 871 F.2d 115 (Fed. Cir. 1989). If an independent claim is nonobvious under 35 USC § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants submit that the cited references can not support a *prima facia* case of obviousness.

Doller is directed to an overload indicator device having a housing with an electrical switch and a retractable probe mounted on the underside of the vehicle directly above a permanent stop mounted on the vehicle's axle. The retractable probe is a rigid piston rod (with an axially aligned indicator stop screwed onto the rod's bottom end) mounted in a cylinder positioned directly above the permanent stop. The cylinder is slideably mounted within the housing. In operation, the load indicator is activated by vertically extending the probe downwardly relative to the housing. As the vehicle is loaded, the vehicle's leaf springs compress, which lowers the housing, cylinder, and the rigid probe until a shoulder on the probe makes contact with the permanent stop. The vertical alignment of the

housing, the cylinder, and the rigid probe directly above the permanent stop is such that continued loading will cause rigid probe to force a sliding cylinder to move upwardly in the housing until a contact plate touch on the cylinder engages contact studs on the housing. Accordingly, Doller teaches a device that requires the vertical alignment of the rigid probe, the cylinder, and the housing with the permanent stop to achieve the vertical displacement of the sliding cylinder.

Independent claims 1 and 33 are directed to a load warning system having, *inter alia,* a load indicator spaced apart from an engagement portion when in a first position and configured to move to a second position and engage the engagement portion when the frame of the vehicle moves a selected distance relative to the vehicle-support portion in response to the load being applied to the load-support portion. The load indicator has a trigger "resiliently bendable against the engagement portion after the load indicator is moved to the second position."

Doller does not disclose teach or suggest a load warning system having a load indicator having a trigger resiliently bendable against the engagement portion after the load indicator is moved to a second position as claimed. To the contrary, Doller teaches a device that requires a rigid probe vertically aligned with a permanent stop so that the rigid probe will push the sliding cylinder up into the housing until the contact plate touches the contact studs. Doller teaches away from a trigger resiliently bendable against an engagement portion as claimed in the present application. Any such modification of the device of Doller to provide a trigger resiliently bendable against engagement portion as claimed would destroy the intended function of the rigid probe that is vertically aligned with the permanent stop so that the engagement of the probe with the permanent stop will force the sliding cylinder upwardly into the housing. Further, any such modification of the device of Doller to provide claimed load warning system would only be apparent to one skilled in the art after fully understanding the present invention and applying impermissible hindsight analysis.. Accordingly, Doller does not teach or suggest all elements of the claimed invention and it does not suggest the modifications that would bring the reference into

conformity with the application's claims. Therefore, Applicants respectfully submit that claims 1 and 33, and their respective dependent claims, are patentable over Doller and are in condition for allowance.

Independent claim 15 has been amended to clarify that the load indicator has a sensor assembly spaced laterally apart from the engagement portion so as to be out of vertical alignment with the engagement portion. At least a portion of the trigger member is in vertical alignment with the engagement portion and being directly engagable with the engagement portion. As indicated above, the device of Doller has the housing, the cylinder, the contact plate, and contact studs positioned vertically above the permanent stop to achieve the vertical axial motion of the probe and cylinder relative to the housing. While the probe can be retracted into the housing during operation of the vehicle, the housing and cylinder are still positioned above the permanent stop and could be damaged if the permanent stop on the axle hits the bottom of the housing.

Doller teaches away from providing a load indicator with a sensor assembly spaced laterally apart from an engagement portion so as to be out of vertical alignment with the engagement portion, while providing a trigger member having at least a portion in vertical alignment with the engagement portion and being directly engagable with the engagement portion. Modifying the device of Doller to provide the load indicator's orientation in the present application would only be apparent to one skilled in the art after understanding the present invention and applying impermissible hindsight analysis. Further, any such modification of Doller would destroy the intended function of the vertically aligned device. Therefore, claim 15 and its dependent claims are patentable over Doller and are in condition for allowance.

Independent claims 26 and 41 have been amended to clarify that the load indicator of the claimed system is configured to rotate and to move vertically relative the vehicle support or the frame to which the load indicator is not mounted. The load indicator moves to the second position to engage the engagement portion substantially along a point

contact when the load applied to the load-support portion exceeds a second maximum load less than a first maximum load and when the load is positioned rearward of the load indicator or the engagement portion.

The arrangement of the system of claims 26 and 41 allows the load indicator to detect when the vehicle has been improperly loaded with too much weight rearward of the load indicator and the engagement portion even though the load is less that the first maximum load. The load indicator also utilizes a single point contact that can engage the engagement portion. Accordingly, the load indicator is not susceptible to inaccuracies if the load-support portion of the vehicle rotates longitudinally and/or laterally due to the excess weight placed on the vehicle behind the load indicator or the engagement portion. The engagement along the single point contact (which occurs when the round trigger engages the engagement portion) also avoids system inaccuracies that would occur in the system of Doller due to mud, dirt, or debris buildup between the permanent stop and the flat shoulder of the adjustable indicator stop. Accordingly, Doller provides no teaching or suggestion of the load indicator with all of the features of the claimed system. The reference also provides no suggestion of modifying the device to provide a system with a load indicator as claimed. Any such modification would only be apparent to one skilled in the art after understanding the present invention and applying impermissible hindsight analysis. Therefore, claims 26 and 41, and their respective dependent claims, are patentable over the Doller, and are in condition for allowance.

Independent claim 46 has been amended to clarify that the system has a relay assembly coupled to the load indicator and to the starter relay. The relay assembly is configured to allow for generation of the warning when the vehicle is in a park or neutral gear condition. Applicants respectfully submit for the reasons discussed above and the features in the claim that claim 46 and its dependent claims are patentable over the applied references and are in condition for allowance.

Regarding dependent claims 7 and 25, Applicants respectfully submit for the above reasons that these claims are patentable over Doller. Further, the claims include a data collector coupled to the vehicle and configured to collect and output data including at least one of time, date, load, activation of the warning indicator, and duration of use of the system. Doller is completely silent regarding a system with a data controller as claimed. The only teaching of a data collector is provided by the present application. Accordingly, modifying the device of Doller to provide the system with the data collector as claimed would only be apparent to one skilled in the art after understanding the present invention and applying impermissible hindsight analysis. Therefore, claims 7 and 25 are patentable over Doller and are in condition for allowance.

Regarding dependent claims 11, 20, and 30, Applicants respectfully submit for the above reasons that these claims are patentable over Doller. Further, the claims include a relay assembly coupled to the load indicator and to a starter relay of the vehicle. Doller briefly describes a schematic wiring diagram wherein the switch is connected directly to a battery. See Col. 5, lines 19-27 The reference is silent regarding a relay assembly coupled to the load indicator and to a starter relay as claimed. Further, Doller provides no suggestion or motivation to modify the device to provide the system as claimed. Modifying the device of Doller to provide the relay assembly as claimed would only be apparent to one skilled in the art after understanding the present invention and applying impermissible hindsight analysis. Therefore, claims 11, 20, and 30 are patentable over Doller and are in condition for allowance.

Regarding dependent claims 13, 22, 32, 40, and 45, Applicants respectfully submit for the above reasons that these claims are patentable over Doller. Further, the claims include a control system coupled to the load indicator and to the warning system. The control system is configured to monitor a frequency or duration of signals from the load indicator and to block the signal from reaching the warning indicator until a selected condition of frequency or duration of the signals exist. Doller is again silent regarding such a control assembly as claimed. Further, Doller provides no suggestion or motivation to

modify the device to provide the system as claimed. Modifying the device of Doller to provide the relay assembly as claimed would only be apparent to one skilled in the art after understanding the present invention and applying impermissible hindsight analysis. Therefore, claims 13, 22, 32, 40, and 45 are patentable over Doller and are in condition for allowance.

Dependent claim 17 has been amended to clarify that the sensor assembly includes a switch and that the trigger is a flexible trigger bendable against the engagement member are the load indicator is moved to the second position. Applicants respectfully submit for the above reasons that claim 17 is patentable over Doller and is in condition for allowance.

F. Rejection Under 35 USC §103(a) Over Doller and Nommensen.

The Examiner rejected dependent claims 12, 21, and 31 under 35 USC §103(a) as being obvious and unpatentable over Doller taken with U.S. Patent Application Publication No. 2004/0032323 (Nommensen). The rejected claims are directed to a load warning system that has, inter alia, a relay assembly coupled to the load indicator and to the starter relay of the vehicle, and the relay assembly is configured to allow for generation of the warning when the vehicle is in a park or neutral gear condition. As indicated above, Doller does not teach or suggest relay assembly as claimed. Nommensen is directed to a magnetic proximity detection apparatus for detection an overloaded condition of a vehicle. Nommensen does not correct the deficiencies of Doller.

Nommensen is silent regarding a load warning system having a relay assembly configured to allow for generation of a warning when the vehicle is in a park or neutral gear condition as claimed. In fact, the only references in Nommensen to a parked condition are in claims 21, 24, Paragraph 0026 ("the warning device is only electrically connected to the circuit when the truck is parked"), Paragraph 0064 ("...the warning device is only electrically connected to the circuit 36 when the truck 12 is parked."), and Paragraph 0067 ("... the warning device is actuated providing the truck is parked."). The reference does not disclose or teach how the warning device determines if the truck is parked.

Nommensen is silent regarding system details of a relay assembly coupled to the load indicator and to a starter relay of the vehicle. Only the present application discusses providing a relay assembly coupled to the load indicator and to a starter relay of the vehicle. Even if the references could be properly combined, the combination would still not teach the invention as claimed. Any modification to the references to provide the claimed invention would only be apparent to one skilled in the art after fully understanding the present invention and applying impermissible hindsight analysis. Therefore, claims 12, 21, and 31 are patentable over the applied references and are in condition for allowance.

G. New Claims 50-52

New claims 50-52 have been added to clarify that the sensor assembly includes a housing and a switch in the housing, the switch is coupled to the trigger. No new matter has been added. Applicants respectfully submit for the above reasons and the features in the claims, that new claims 50-52 are patentable over the applied references and are in condition for allowance.

In view of the above amendment, Applicants believe that the pending application is in condition for allowance. Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 157468003US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

By _____

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Attachments